# MOCHECOFETTE 2 5 OCT 2005

#### 1/13

#### SEQUENCE LISTING

<110> YOUSUKE, EBINA TOSHIYUKI, ODDINAMEDICAL LABORATURIES CONTROLL MEDICAL AND BIOLOGICAL LABORATURIES CONTROLL METHOD FOR DETERMINATION OF INSULINARECEPTOR ALPHA SUBUNIT (130) M3-A0301Y1P

<151> 2003-04-25

<150> JP 2003-433303

<151> 2003-12-26

<160> 2

<170> PatentIn version 3.1

<210> 1

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<212> DNA

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				ccc Pro								240
Leu				gat Asp								288
				ctg Leu 75								336
				tac Tyr								384

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Arg	Ile	Glu	Lys	Asn	Asn	Glu	Leu	Cys	Tyr	Leu	Ala	Thr	Ile	Asp	Trp	
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tcc	cgt	atc	ctg	gat.	tec	øt.ø	ទួនទ	gat	aat	cac	atc	ata	t t a	220	222	528
			Leu													020
	135				551	140	014	пор	11011	1115	145	141	Deu	11311	Lys	
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gat	gac	aac	gag	gag	tgt	gga	gac	atc	tgt	ccg	ggt	acc	gcg	aag	ggc	576
Asp	Asp	Asn	Glu	Glu	Cys	Gly	Asp	Ile	Cys	Pro	Gly	Thr	Ala	Lys	Gly	
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Lys	Thr	Asn	Cys	Pro	Ala	Thr	Val	Ile	Asn	Gly	G1n	Phe	Val	Glu	Arg	
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Cys	Trp	Thr	His	Ser	His	Cys	Gln	Lys	Val	Cys	Pro	Thr	Ile	Cys	Lys	
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ser	піѕ		Cys	ınr	Ата	Glu		Leu	Cys	Cys	H1S		Glu	Cys	Leu	
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ggc	aac	tgt	tct	cag	ccc	gac	gac	ccc	acc	aag	tgc	gtg	gcc	tgc	CgC	768
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			gga Gly	•							1104
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Gln	Asn	Leu	Arg		Leu	Trp	Asp	Trp		Lys	His	Asn	Leu		Thr	
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Inr	GIII	GIY	425	Leu	rne	Phe	піѕ		ASN	Pro	Lys	Leu	-	Leu	Ser	
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Leu	Leu	Arg	Trp		Pro	Tyr	Trp	Pro		Asp	Phe	Arg	Asp		Leu	
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~~~	++0	o t a	o t a	++ 0	+00	000	<b>~</b> 0 <b>~</b>	<b>700</b>	+	+-+		+				1600
						aaa										1632
оту	1 116	MEL	505		1 ) 1	Lys	Giu	510	FIO	1 9 1	<b>G111</b>	ASII		IIII	GIU	
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cac aac gtg gtt ttc gtc ccc aga aaa acc tct tca ggc act ggt gcc         His Asn Val Val Phe Val Pro Arg Lys Thr Ser Ser Gly Thr Gly Ala 710       715         710       720         gag gac cct agg cca tct cgg aaa cgc agg tcc ctt ggc gat gtt ggg Glu Asp Pro Arg Pro Ser Arg Lys Arg Arg Ser Leu Gly Asp Val Gly 730       Ser Arg Lys Arg Arg Ser Leu Gly Asp Val Gly 740         aat gtg acg gtg gcc gtg ccc acg gtg gca gtt tcc cac acc act tcc Asn Val Thr Val Ala Val Pro Thr Val Ala Ala Phe Pro Asn Thr Ser 745       750         tcg acc acg gtg gtg ccc acg agt ccg agg gag cac acc acc acg gtg gag gag cac acc acc acg gtg gtg acc acc acg acc acc acg gtg gtg acc acc acc acg gtg gtg acc acc acc acc acc acc acc acc acc ac	u
His Asn Val         Val Phe         Val Phe Val Pro Arg Lys         Thr Ser Ser Gly         Thr Gly Ala 725           gag gac cct agg cca tct cgg aaa cgc Glu Asp Pro Arg Pro Arg Pro Ser Arg Lys Arg Arg Ser Leu Gly Asp Pro Arg Pro 730         Arg Lys Arg Arg Ser Leu Gly Asp Val Gly 740           aat gtg acg gtg gcc gtg ccc acg gtg gca gct ttc ccc aac act tcc Asn Val Thr Val Ala Val Pro Thr Val Ala Ala Phe Pro Asn Thr Ser 745         Thr Ser Pro Glu Glu His Arg Pro Phe Glu Lys 760           tcg acc agc gtg aaa aag gag tcg ctg gtg gtg gtg gtg aac aag gag tcg ctg gtg aac aag gag tcg ctg gtg gtg aac aag gag tcg ctg gtc atc tcc ggc ttg cga cac ttc acg Val Val Asn Lys Glu Ser Leu Val Ile Ser Gly Leu Arg His Phe Thr 775           ggc tat cgc atc gag ctg cag gtt tgc aac cag gac acc ct gag gaa Gly Tyr Arg Ile Glu Leu Gln Ala Cys Asn Gln Asp Thr Pro Glu Glu R90           795         800	
His Asn Val         Val Phe         Val Phe Val Pro Arg Lys         Thr Ser Ser Gly         Thr Gly Ala 725           gag gac cct agg cca tct cgg aaa cgc Glu Asp Pro Arg Pro Arg Pro Ser Arg Lys Arg Arg Ser Leu Gly Asp Pro Arg Pro 730         Arg Lys Arg Arg Ser Leu Gly Asp Val Gly 740           aat gtg acg gtg gcc gtg ccc acg gtg gca gct ttc ccc aac act tcc Asn Val Thr Val Ala Val Pro Thr Val Ala Ala Phe Pro Asn Thr Ser 745         Thr Ser Pro Glu Glu His Arg Pro Phe Glu Lys 760           tcg acc agc gtg aaa aag gag tcg ctg gtg gtg gtg gtg aac aag gag tcg ctg gtg aac aag gag tcg ctg gtg gtg aac aag gag tcg ctg gtc atc tcc ggc ttg cga cac ttc acg Val Val Asn Lys Glu Ser Leu Val Ile Ser Gly Leu Arg His Phe Thr 775           ggc tat cgc atc gag ctg cag gtt tgc aac cag gac acc ct gag gaa Gly Tyr Arg Ile Glu Leu Gln Ala Cys Asn Gln Asp Thr Pro Glu Glu R90           795         800	
710       715       720       725         gag gac cct agg ccc tct agg aaa cgc agg tcc ctt agg gat gtt ggg aaa gla glad acg agg agg aaa ggg aaa acg aaa aaa	c 2256
gag gac cct agg cca tct cgg aaa cgc agg tcc ctt ggc gat gtt ggg Glu Asp Pro Arg Pro Ser Arg Lys Arg Arg Ser Leu Gly Asp Val Gly 730	.a
Glu Asp         Pro         Arg         Pro         Ser         Arg         Lys         Arg         Arg         Ser         Leu         Gly         Asp         Val         Gly           aat         gtg         acg         gtg         gcc         gtg         ccc         acg         gtg         gcd         ttc         ccc         aac         act         tcc         aac         gtg         gcd         dcc         acc         acc         gtg         gcd         dcc         acc         acc         gcd         gcd         dcc         acc         ttt         gag         acc         ttt         gag         acc         ttt         gag         acc         ttt         acc         ttt         acc         ttc         acc         ttt         acc         ttt         acc         ttt         acc         ttt         acc         ttt </td <td>:5</td>	:5
Glu Asp         Pro         Arg         Pro         Ser         Arg         Lys         Arg         Arg         Ser         Leu         Gly         Asp         Val         Gly           aat         gtg         acg         gtg         gcc         gtg         ccc         acg         gtg         gcd         ttc         ccc         aac         act         tcc         aac         gtg         gcd         dcc         acc         acc         gtg         gcd         dcc         acc         acc         gcd         gcd         dcc         acc         ttt         gag         acc         ttt         gag         acc         ttt         gag         acc         ttt         acc         ttt         acc         ttc         acc         ttt         acc         ttt         acc         ttt         acc         ttt         acc         ttt </td <td></td>	
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Ser Thr Ser Val Pro Thr Ser Pro Glu Glu His Arg Pro Phe Glu Lys 760	
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gtg gtg aac aag gag tcg ctg gtc atc tcc ggc ttg cga cac ttc acg Val Val Asn Lys Glu Ser Leu Val Ile Ser Gly Leu Arg His Phe Thr 775 780 785  ggc tat cgc atc gag ctg cag gct tgc aac cag gac acc cct gag gaa Gly Tyr Arg Ile Glu Leu Gln Ala Cys Asn Gln Asp Thr Pro Glu Glu 790 795 800 805	s
Val Val Asn Lys Glu Ser Leu Val Ile Ser Gly Leu Arg His Phe Thr 775	
Val Val Asn Lys Glu Ser Leu Val Ile Ser Gly Leu Arg His Phe Thr 775	
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Gly Tyr Arg Ile Glu Leu Gln Ala Cys Asn Gln Asp Thr Pro Glu Glu 790 795 800 805	
Gly Tyr Arg Ile Glu Leu Gln Ala Cys Asn Gln Asp Thr Pro Glu Glu 790 795 800 805	
790 795 800 805	
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can tac sat ata aca aco tac ata act aca aca aca ata oct	5
cgg tgc agt gtg gca gcc tac gtc agt gcg agg acc atg oct and	
· -	
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810 815 820	

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- Asn Val Val His Leu Met Trp Gln Glu Pro Lys Glu Pro Asn Gly Leu 840 845 850
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- His Leu Cys Val Ser Arg Lys His Phe Ala Leu Glu Arg Gly Cys Arg 870 885 880 885
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#### SEQUENCE LISTING

<110> Ebina, Yousuke Obata, Toshiyuki Okamoto, Eiji

# JC20 Rec'd PET/PTO 2 5 OCT 2005

<120> METHODS FOR MEASURING THE INSULIN RECEPTOR ALPHA SUBUNIT

<130> 082368-006600US

<150> PCT/JP2004/005412

<151> 2004-04-15

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					aat Asn					_	_			-		480
	_		_	-	tcc Ser			-				_	_			528
-	_				tgt Cys 155		_		_	_				_		576
					gcc Ala											624
					cac His											672
					gcc Ala	-			_	_		_		_	_	720
		_		_	ccc Pro	_				_	_		-	_	_	768
					ggc Gly 235											816
					tgg Trp											864
					aag Lys											912
					aag Lys											960
atg	aat	tcc	agc	aac	ttg	ctg	tgc	acc	cca	tgc	ctg	ggt	ccc	tgt	ccc	1008

Met	Asn 295	Ser	Ser	Asn	Leu	Leu 300	Суѕ	Thr	Pro	Cys	Leu 305	Gly	Pro	Cys	Pro	
	gtg Val															1056
	gcc Ala															1104
	aac Asn		_					_	_	_			-	_		1152
	ggc Gly												_	_		1200
	gct Ala 375															1248
	gag Glu		-	_								_	_	_		1296
_	aac Asn			_			_		_							1344
	cag Gln												_	_		1392
	atc Ile															1440
	aac Asn 455	Asp	Ile	Ala		Lys	Thr		Gly	Asp	Lys	Ala				1488
	gag Glu															1536
	ctg Leu															1584
	ttc Phe							_			-			_		1632
	gat Asp															1680
	gac Asp															1728

		_	_				_			acc Thr 560	-		-			1776
	_		_	-			-	_	_	cgc Arg					_	1824
										gcc Ala						1872
										tca Ser						1920
_						_				aac Asn					_	1968
										gag Glu 640						2016
	_				_	_	_		_	agg Arg						2064
						-	_			cag Gln	_				_	2112
_	_		_	_	_		-		_	aca Thr	_				_	2160
										acg Thr						2208
cac	aac	gtg	gtt	ttc	gtc	ccc	aga	aaa	acc	tct	tca	ggc	act	ggt	gcc	2256
His 710	Asn	Val	Val	Phe	Val 715	Pro	Arg	Lys	Thr	Ser 720	Ser	Gly	Thr	Gly	Ala 725	
-	-							_		tcc Ser			-	_		2304
										gct Ala						2352
										cac His						2400
			_		_	_	_			ggc Gly	_	_			_	2448

ggc tat cgc atc gag ctg led can get tag aac can gag ac acc ct gag gaa         2496           Gly Tyr Arg Ile Glu Leu Gln Ala Cys Asn Gln Asp Thr Pro Glu Glu         305           cgg tgc agt gtg gca gcc tac gtc agt gcg agg acc atg ct gaa gcc         2544           Arg Cys Ser Val Ala Ala Ala Tyr Val Serla Arg Thr Met Pro Glu Ala         2544           aag gct gat gac att gtt ggc cct gtg acg agg acc at gaa atc ttt gag acc Lys Ala Asp Asp Ile Val Gly Pro Val Thr His Glu Ile Phe Glu Asn 835         2592           aac gtc gtc cac ttg atg tgg cag gag ccg aag gag ccc aat ggt ctg cag atg gag gag ccc ast gat gag gag ctg Ash Val His Leu Met Trp Gln Glu Pro Lys Glu Pro Asn Gly Leu 855         2640           atc gtg ctg tat gaa gtg agt tat cgg cag att gg gad gag gag ctg Ile Val Leu Tyr Glu Val Ser Tyr Arg Arg Tyr Gly Asp Glu Glu Leu 865         2688           cat ctc tgc gtc tac cgc gaa gag cac ttc gg cga att ggg gag gg ctg lyc agg agg ctg Ile Val Leu Tyr Glu Val Ser Tyr Arg Arg Tyr Gly Asp Glu Arg Gly Cys Arg 875         2736           ctg ctgt gg ctg tac cg gag aac cac gg gg acc ttg gag gag ctg lyc agg agg ctg gag gag ctg gag gag ctg gag gag ctg gag gag gag gag gag gag gag gag gag g			775					780					785					
Arg Cys Ser Val Ala Ala Tyr Val Ser Ala Arg Thr Met Pro Glu Ala 810 810 815 820 820 820 820 820 825 825 825 825 825 825 825 825 825 825		ĞĨy		_			Leu	_	-	_		Gln	_				Glu	2496
Lys Ala Asp Asp Ile Val Gly Pro Val Thr His Glu Ile Phe Glu Asn 835  aac gtc gtc cac ttg atg tgg cag gag ccg aag gag ccc aat ggt ctg 840 No. 840  atc gtg ctg tat gaa gtg agt tat cgg cag tat ggt gat gag gag ctg 11e Val Leu Tyr Glu Val Ser Tyr Arg Arg Tyr Gly Asp Glu Glu Leu 850  cat ctc tgc gtc tcc cgc aag cac ttc gct ctg gaa cgg ggc tgc agg His Leu Cys Val Ser Arg Lys His Phe Ala Leu Glu Arg Gly Cys Arg 870  ctc ctt gcg ggg ctg tca ccg ggg aac tac agc gtg cga atc cgg ggc acc acc Leu Arg Gly Leu 8er Pro Gly Asn Tyr Ser Val Arg Ile Arg Ala Thr 895  ctc ctt gcg ggg cac acc ggg acc acc gag acc cac tt ttc tac gtg cgt gag cgg atc cac gg gcc acc leu Ala Gly Asn Gly Ser Trp Thr Glu Pro Thr Tyr Phe Tyr Val 905  aca gac tat tta gac gtc ccg tca aat Thr Asp Tyr Leu Asp Val Pro Ser Asn 920    **210 > 2  **221 > \$1GNAL   **222 \ (1) \cdots (27)  **400 > 2  Met Gly Asn Cys Ser Val Ile Gly Ala Ala Ala Ala Ala Pro Leu Leu Val -25  Ala Val Ala Ala Leu Leu Leu Gly Ala Ala Gly His Leu Glu Tyr Pro Gly -10  Glu Leu Glu Asn Cys Ser Val Ile Glu Gly His Leu Glu Ile Leu Leu 25  Met Phe Lys Thr Arg Pro Glu Asp Phe Arg Asp Leu Ser Phe Pro Lys 40  ***45  ***46  ***2640  ***46  ***2640  ***2640  ***2640  ***2640  ***2640  ***2640  ***2640  ***2640  ***2640  ***2640  ***2640  ***2640  ***2640  ***2640  ***2640  ***2640  ***2640  ***2640  ***2640  ***2640  ***2640  ***2640  ***2640  ***2640  ***2640  ***2640  ***2640  ***2640  ***2640  ***2640  ***2640  ***2640  ***2640  ***2640  ***2640  ***2640  ***2640  ***2640  ***2640  ***2640  ***2640  ***2640  ***2640  ***2640  ***2640  ***2640  ***2640  ***2640  ***2640  ***2640  ***2640  ***2640  ***2640  ***2640  ***2640  ***2640  ***2640  ***2640  ***2640  ***2640  ***2640  ***2640  ***2640  ***2640  ***2640  ***2640  ***2640  ***2640  ***2640  ***2640  ***2640  ***2640  ***2640  ***2640  ***2640  ***2640  ***2640  ***2640  ***2640  ***2640  ***2640  ***2640  ***2640  ***2640  ***2640  ***2640  ***2640  ***2640  ***2640  ***2640  ***2640  ***2640  ***2640  ***2640  ***2640  ***2640  ***			_	_		Āla			_		Ālā			_		Ğlu	-	2544
Asn Val Val His Leu Met Try 81n 840 850 Asn 61y Leu 840 840 B40 B40 B45 845 B50 Asn 61y Leu 850 Asn 61y Leu 340 B40 B40 B40 B50 B50 Asn 61y Leu 850 B50 B50 B50 B50 B50 B50 B50 B50 B50 B					Asp					Val					Phe			2592
The Val Leu Tyr Glu Val Ser Tyr Arg Arg Tyr Gly Asp Glu Glu Leu 855   Ser Companies of the				Val					Gln					Pro				2640
### Leu Cys Val Ser Arg Lys His Phe Ala Leu Glu Arg Gly Cys Arg 870			Val	_		-		Ser			_		Gly	-			_	2688
Leu Arg Gly Leu Ser Pro Gly Asn Tyr Ser Val Arg Ile Arg Ala Thr 890    tcc ctt gcg ggc aac ggc tct tgg acg gaa ccc acc tat ttc tac gtg Ser Leu Ala Gly Asn Gly Ser Trp Thr Glu Pro Thr Tyr Phe Tyr Val 905    aca gac tat tta gac gtc ccg tca aat Thr Asp Tyr Leu Asp Val Pro Ser Asn 925 <a href="#">2859</a> <a href="#">2859</a>		His		_	-		Arg	_			-	Leu	-			_	Arg	2736
Ser Leu Ala Gly Asn Gly Ser Trp Thr Glu Pro Thr Tyr Phe Tyr Val 905		_	_		_	Ser	_				Ser		_			Ala		2784
Thr Asp Tyr Leu Asp Val Pro Ser Asn 925 <pre> &lt;210&gt; 2 &lt;211&gt; 953 &lt;212&gt; PRT &lt;213&gt; Homo sapiens  </pre> <pre> &lt;220&gt; &lt;221&gt; SIGNAL &lt;222&gt; (1)(27)  &lt;400&gt; 2  Met Gly Thr Gly Gly Arg Arg Gly Ala Ala Ala Ala Pro Leu Leu Val</pre>					Gly					Thr					Phe			2832
<pre>&lt;211&gt; 953 &lt;212&gt; PRT &lt;213&gt; Homo sapiens  </pre> <pre>&lt;220&gt; &lt;221&gt; SIGNAL &lt;222&gt; (1)(27)  &lt;400&gt; 2  Met Gly Thr Gly Gly Arg Arg Gly Ala Ala Ala Ala Pro Leu Leu Val</pre>			_	Tyr		_	-	_	Ser									2859
<pre>&lt;221&gt; SIGNAL &lt;222&gt; (1) (27)  &lt;400&gt; 2  Met Gly Thr Gly Gly Arg Arg Gly Ala Ala Ala Ala Pro Leu Leu Val</pre>	<211> 953 <212> PRT																	
Met Gly Thr Gly Gly Arg Arg Gly Ala Ala Ala Ala Pro Leu Leu Val	<221> SIGNAL																	
-25				Thr	Gly	Gly	Arg	Arg	Gly	Ala	Ala	Ala	Ala	Pro	Leu	Leu	Val	
Glu Val Cys Pro Gly Met Asp Ile Arg Asn Asn Leu Thr Arg Leu His 10 15 20  Glu Leu Glu Asn Cys Ser Val Ile Glu Gly His Leu Gln Ile Leu Leu 25 30 35  Met Phe Lys Thr Arg Pro Glu Asp Phe Arg Asp Leu Ser Phe Pro Lys 40 45 50				-25					-20					-15				
Glu Leu Glu Asn Cys Ser Val Ile Glu Gly His Leu Gln Ile Leu Leu 25 30 35  Met Phe Lys Thr Arg Pro Glu Asp Phe Arg Asp Leu Ser Phe Pro Lys 40 45 50		Glu		Cys	Pro		Met	-	Ile	Arg		Asn	_	Thr	Arg		-	
Met Phe Lys Thr Arg Pro Glu Asp Phe Arg Asp Leu Ser Phe Pro Lys 40 45 50		Glu	Leu	Glu			Ser	Val	Ile			His	Leu	Gln			Leu	
		Met	Phe			Arg	Pro	Glu	_		Arg	Asp	Leu			Pro	Lys	
		Leu	Ile		Ile	Thr	Asp	Tyr		Leu	Leu	Phe	Arg		Tyr	Gly	Leu	

Glu Ser Leu Lys Asp Leu Phe Pro Asn Leu Thr Val Ile Arg Gly Ser Arg Leu Phe Phe Asn Tyr Ala Leu Val Ile Phe Glu Met Val His Leu Lys Glu Leu Gly Leu Tyr Asn Leu Met Asn Ile Thr Arg Gly Ser Val Arg Ile Glu Lys Asn Asn Glu Leu Cys Tyr Leu Ala Thr Ile Asp Trp Ser Arg Ile Leu Asp Ser Val Glu Asp Asn His Ile Val Leu Asn Lys Asp Asp Asn Glu Glu Cys Gly Asp Ile Cys Pro Gly Thr Ala Lys Gly Lys Thr Asn Cys Pro Ala Thr Val Ile Asn Gly Gln Phe Val Glu Arg Cys Trp Thr His Ser His Cys Gln Lys Val Cys Pro Thr Ile Cys Lys Ser His Gly Cys Thr Ala Glu Gly Leu Cys Cys His Ser Glu Cys Leu Gly Asn Cys Ser Gln Pro Asp Asp Pro Thr Lys Cys Val Ala Cys Arg Asn Phe Tyr Leu Asp Gly Arg Cys Val Glu Thr Cys Pro Pro Tyr Tyr His Phe Gln Asp Trp Arg Cys Val Asn Phe Ser Phe Cys Gln Asp Leu His His Lys Cys Lys Asn Ser Arg Arg Gln Gly Cys His Gln Tyr Val Ile His Asn Asn Lys Cys Ile Pro Glu Cys Pro Ser Gly Tyr Thr Met Asn Ser Ser Asn Leu Leu Cys Thr Pro Cys Leu Gly Pro Cys Pro Lys Val Cys His Leu Leu Glu Gly Glu Lys Thr Ile Asp Ser Val Thr Ser Ala Gln Glu Leu Arg Gly Cys Thr Val Ile Asn Gly Ser Leu Ile Ile Asn Ile Arg Gly Gly Asn Asn Leu Ala Ala Glu Leu Glu Ala Asn Leu Gly Leu Ile Glu Glu Ile Ser Gly Tyr Leu Lys Ile Arg Arg Ser Tyr Ala Leu Val Ser Leu Ser Phe Phe Arg Lys Leu Arg Leu Ile Arg Gly Glu Thr Leu Glu Ile Gly Asn Tyr Ser Phe Tyr Ala Leu Asp Asn Gln Asn Leu Arg Gln Leu Trp Asp Trp Ser Lys His Asn Leu Thr Thr Thr Gln Gly Lys Leu Phe Phe His Tyr Asn Pro Lys Leu Cys Leu Ser Glu Ile His Lys Met Glu Glu Val Ser Gly Thr Lys Gly Arg Gln Glu Arg Asn Asp Ile Ala Leu Lys Thr Asn Gly Asp Lys Ala Ser Cys Glu Asn Glu Leu Leu Lys Phe Ser Tyr Ile Arg Thr Ser Phe Asp Lys Ile Leu Leu Arg Trp Glu Pro Tyr Trp Pro Pro Asp Phe Arg Asp Leu Leu Gly Phe Met Leu Phe Tyr Lys Glu Ala Pro Tyr Gln Asn Val Thr Glu Phe Asp Gly Gln Asp Ala Cys Gly Ser Asn Ser Trp Thr Val Val Asp Ile Asp Pro Pro Leu Arg Ser Asn Asp Pro Lys Ser Gln Asn His Pro 

Gly Trp Leu Met Arg Gly Leu Lys Pro Trp Thr Gln Tyr Ala Ile Phe Val Lys Thr Leu Val Thr Phe Ser Asp Glu Arg Arg Thr Tyr Gly Ala Lys Ser Asp Ile Ile Tyr Val Gln Thr Asp Ala Thr Asn Pro Ser Val Pro Leu Asp Pro Ile Ser Val Ser Asn Ser Ser Ser Gln Ile Ile Leu Lys Trp Lys Pro Pro Ser Asp Pro Asn Gly Asn Ile Thr His Tyr Leu Val Phe Trp Glu Arg Gln Ala Glu Asp Ser Glu Leu Phe Glu Leu Asp Tyr Cys Leu Lys Gly Leu Lys Leu Pro Ser Arg Thr Trp Ser Pro Pro Phe Glu Ser Glu Asp Ser Gln Lys His Asn Gln Ser Glu Tyr Glu Asp Ser Ala Gly Glu Cys Cys Ser Cys Pro Lys Thr Asp Ser Gln Ile Leu Lys Glu Leu Glu Glu Ser Ser Phe Arg Lys Thr Phe Glu Asp Tyr Leu His Asn Val Val Phe Val Pro Arg Lys Thr Ser Ser Gly Thr Gly Ala Glu Asp Pro Arg Pro Ser Arg Lys Arg Arg Ser Leu Gly Asp Val Gly Asn Val Thr Val Ala Val Pro Thr Val Ala Ala Phe Pro Asn Thr Ser Ser Thr Ser Val Pro Thr Ser Pro Glu Glu His Arg Pro Phe Glu Lys Val Val Asn Lys Glu Ser Leu Val Ile Ser Gly Leu Arg His Phe Thr Gly Tyr Arg Ile Glu Leu Gln Ala Cys Asn Gln Asp Thr Pro Glu Glu Arg Cys Ser Val Ala Ala Tyr Val Ser Ala Arg Thr Met Pro Glu Ala Lys Ala Asp Asp Ile Val Gly Pro Val Thr His Glu Ile Phe Glu Asn Asn Val Val His Leu Met Trp Gln Glu Pro Lys Glu Pro Asn Gly Leu Ile Val Leu Tyr Glu Val Ser Tyr Arg Arg Tyr Gly Asp Glu Glu Leu His Leu Cys Val Ser Arg Lys His Phe Ala Leu Glu Arg Gly Cys Arg Leu Arg Gly Leu Ser Pro Gly Asn Tyr Ser Val Arg Ile Arg Ala Thr Ser Leu Ala Gly Asn Gly Ser Trp Thr Glu Pro Thr Tyr Phe Tyr Val Thr Asp Tyr Leu Asp Val Pro Ser Asn